

Serial No.: 10/769,768
Docket No.: 101-1013
Amendment dated April 22, 2008
Reply to the Office Action of January 24, 2008

REMARKS

Introduction

Applicant notes with appreciation the Examiner's indication that the restriction requirement mailed on 10/03/2007 has been withdrawn. Applicant also notes with appreciation the Examiner's indication that claim 9 would be allowable if rewritten in independent form, and that each of the references cited in the Information Disclosure Statement of February 3, 2004 have been considered.

Upon entry of the foregoing amendment, claims 1-16 are pending in the application. Claims 3, 9, and 16 have been amended. No new matter is being presented. In view of the following remarks, reconsideration and allowance of all the pending claims are requested.

Objections

Drawings

The Examiner has objected to FIG. 9 under 37 CFR 1.83(a) for allegedly failing to show a legend describing the labels on the figure as described in the specification, stating that "[a]ny structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d)." Office Action, page 2, item 3.

The Examiner takes the position that Applicant must submit a corrected drawing sheet of FIG. 9 to include "a legend" describing the labels on the figure. However, Applicant respectfully disagrees with the Examiner's position, and submits that 37 CFR 1.83(a) does not require Applicant to provide "a legend" in FIG. 9 to facilitate a proper understanding of the figure. Although 37 CFR 1.83(a) requires the drawing to include "every feature of the invention specified in the claims," nowhere does 37 CFR 1.83(a) require the drawings to include "a legend" describing the labels on the figure, especially when, as in the present case, the term does not appear anywhere in Applicant's specification or claims, and is therefore not a "feature of the invention specified in the claims."

Nevertheless, in an earnest attempt to address the Examiner's concerns, Applicant has amended paragraphs [0059], [0060], and [0061] of the specification to correct obvious

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typographical errors and to more clearly describe certain labels and structure appearing in FIG. 9. In view of these changes to paragraphs [0059], [0060], and [0061], it is respectfully submitted that one of ordinary skill in the art will further readily understand the claimed subject matter, with reference to the drawings as originally filed, and with reference to the application as a whole. Accordingly, reconsideration and withdrawal of the objection to FIG. 9 are respectfully requested.

Claim Objection

The Examiner has objected to claim 16 due to informalities. By this Amendment, claim 16 has been amended to address these informalities in an earnest attempt to overcome this objection. Accordingly, reconsideration and withdrawal of the objection to claim 16 are respectfully requested.

Rejection under 35 USC § 112

Claim 9 has been rejected under 35 U.S.C. §112 as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Reconsideration and withdrawal of this rejection is respectfully requested for at least the following reasons.

In the Office Action, the Examiner alleges that “[i]t is unclear and confusing as to what is the claimed a transistor which has a collector coupled to the extracted current and a base coupled to the internal current (e.g., see claim 9, lines 4-5). It is because a collector and a base CAN NOT perform “coupled” to “current.” Office Action, page 4.

Although Applicant disagrees with the Examiner's statement that “a collector and a base CAN NOT perform *coupled* to *current*,” Applicant has nevertheless amended claim 9 to more clearly define “a transistor which has a collector in connection to the extracted current and a base in connection to the internal current,” in an earnest attempt to obviate the Examiner's concerns in this regard, and to expedite prosecution of the present claims to a successful conclusion. The amendment to claim 9 is clearly supported throughout the application, for example in FIG. 9, and corresponding portions of the specification. Accordingly, it is respectfully submitted that claim 9 is not unclear and confusing, and that one of ordinary skill in the art would readily understand the scope and meaning of claim 9, by virtue of the claim language

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itself, and with reference to the application as a whole. Accordingly, it is respectfully submitted that claim 9 satisfies the provisions of 35 USC 112, second paragraph, and reconsideration and withdrawal of the rejection to claim 9 under 35 USC 112, second paragraph, are respectfully requested.

Rejection under 35 USC § 103

Claims 1, 4-6, 8 and 10-14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Applicant admitted prior art (hereinafter "AAPA") in view of U.S. Patent No. 6,434,232 to Ludeman (hereinafter "Ludeman"). Applicant respectfully traverses this rejection for at least the following reasons.

Independent Claims

Claims 1 and 6

On page 5 of the Office Action of January 24, 2008, the Examiner takes the position that AAPA teaches all of the elements recited in independent claims 1 and 6, except the Examiner admits that AAPA does not specifically teach "obtaining an internal current from a loop voltage generated." See, Office Action, page 5.

The Examiner then cites Ludeman as allegedly teaching "obtaining an internal current from a loop voltage generated (col. 2, lines 27-33)", stating that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify AAPA to incorporate the feature of obtaining an internal current from a loop voltage generated in AAPA's invention as taught by Ludeman," and that "[t]he motivation for the modification is to do so in order to measure a loop current from a loop voltage." See, Office Action, page 5.

In particular, the Examiner relies on FIGS. 1A and 1B of AAPA to allege that AAPA teaches "disconnecting the telephone network from the external terminal and instead connecting the telephone network to the main terminal, wherein while the internal current is flowing in the main terminal, the main terminal maintains the loop voltage generated when the external terminal is in connection with the telephone network (page 1, paragraphs 0003, 0004)."

Although AAPA describes a telephone network having a main terminal and an external terminal, AAPA does not teach or suggest, among other things, "the main terminal maintains the

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loop voltage generated when the external terminal is in connection with the telephone network,” as recited in claim 1, and as similarly recited in claim 6. Instead, as stated in the Background portion of Applicant's specification describing AAPA, the loop voltage of the main terminal (i.e. first loop voltage) and the loop voltage of the external terminal (i.e. second loop voltage) of AAPA are not the same, but instead, in fact, are different (paragraph [0004]). Accordingly, AAPA makes clear that when there is a change from the second loop voltage to the first loop voltage when the external terminal is disconnected from the telephone network and the main terminal is connected, the exchanger may malfunction by recognizing an interrupt generated by the change from the second loop voltage to the first loop voltage (paragraphs [0004] and [0005]).

For example, as illustrated in FIGS. 1A and 1B of AAPA, when the second DC current signal (section B) is different than the first DC current signal (section C), an interrupt “9” may be generated when the state of the connection with the telephone network is changed, that is, when the second DC current signal changes to the first DC current signal (FIGS. 1A and 1B, paragraph [0005]). This is clearly not the same as “the main terminal maintains the loop voltage generated when the external terminal is in connection with the telephone network,” as recited in claim 1, and as similarly recited in claim 6.

Therefore, for at least the reason that AAPA fails to teach or suggest, among other things, “the main terminal maintains the loop voltage generated when the external terminal is in connection with the telephone network,” claims 1 and 6 are patentably distinguishable over AAPA, either separately or in combination with Ludeman, since Ludeman fails to cure the deficiencies of AAPA as applied to claims 1 and 6.

In particular, it is worth noting that Ludeman fails to teach or suggest, among other things, “the main terminal maintains the loop voltage generated when the external terminal is in connection with the telephone network,” for at least the reasons pointed out below with respect to independent claim 15.

Accordingly, it is respectfully submitted that the Examiner has failed to establish a *prima facie* case of obviousness with respect to claims 1 and 6, and that the subject claims are patentably distinguishable over AAPA and Ludeman, either separately or combined. Therefore, withdrawal of the rejection and allowance of claims 1 and 6 are respectfully requested.

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Dependent Claims

Claims 4, 5, 8, and 10-14

For at least the reason that claims 4, 5, 8, and 10-14 depend, in one way or another, from independent claims 1 and 6, respectively, which are allowable over the cited references as pointed out above, these dependent claims are also allowable over the cited references, for at least the same reasons in which claims 1 and 6 are allowable. Accordingly, withdrawal of the rejection and allowance of claims 4, 5, 8, and 10-14 are respectfully requested.

Rejection under 35 USC §103

Claims 2, 3 and 7 have been rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Ludeman, and further in view of U.S. Patent No. 6,757,378 to Kunisch (hereinafter "Kunisch"). Applicant respectfully traverses this rejection for at least the following reasons.

For at least the reason that claims 2, 3, and 7 depend, in one way or another, from independent claims 1 and 6, respectively, which are allowable for at least the reasons pointed out above, and therefore contain each of the features recited in these independent claims, it is respectfully submitted that claims 2, 3, and 7 are also patentably distinguishable over AAPA and Ludeman, either separately or in combination with Kunisch, for at least the same reasons in which claims 1 and 6 are allowable. In addition, since the Examiner cites Kunisch merely to allege that it teaches features which are lacking in AAPA and Ludeman as pointed out above, Kunisch fails to teach or suggest the features that are lacking in AAPA and Ludeman, as pointed out above with respect to independent claims 1 and 6. Accordingly, withdrawal of the rejection and allowance of dependent claims 2, 3, and 7 are respectfully requested.

Rejection under 35 USC §103

Claims 15 and 16 have also been rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Ludeman. Applicant respectfully traverses this rejection for at least the following reasons.

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Independent Claim

Claim 15

On page 12 of the Office Action of January 24, 2008, the Examiner alleges that claim 15 is rejected for the same reasons as discussed above with respect to claim 1, except the Examiner admits that AAPA does not specifically teach "a controller controlling the loop voltage constant according to the internal signal." The Examiner then cites Ludeman as allegedly teaching "a controller controlling the loop voltage constant according to the internal signal," stating that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify AAPA to incorporate the feature of a controller controlling the loop voltage constant according to the internal signal in AAPA's invention as taught by Ludeman," and that "[t]he motivation for the modification is to do so in order to keep voltage constant such that a loop current can be reduced to a value below a threshold value." See, Office Action, page 12.

Although Ludeman is directed to a method for programming on-hook, off-hook, and transition states of a subscriber loop interface circuit, Ludeman does not teach or suggest, among other things, "a controller controlling the loop voltage constant according to the internal signal when the telephone network is disconnected from the external terminal and connected to the main terminal," as recited in claim 15. Instead, the portions of Ludeman relied on by the Examiner as allegedly reading on Applicant's claim 15 make clear that Ludeman is limited to providing a constant loop voltage (V_{on}) only when the SLIC is in an on-hook state (Ludeman, col. 5, lines 23-24). That is, when the SLIC is in a on-hook state, a constant loop voltage V_{on} is provided; but when the SLIC transitions to an off-hook state, a different loop voltage V_{off} is provided (Ludeman, FIG. 6). This is clearly not the same as "controlling the loop voltage constant according to the internal signal when the telephone network is disconnected from the external terminal and connected to the main terminal," as recited in claim 15.

In fact, Ludeman's claim 1 makes clear that a first voltage level is applied in the on-hook condition, while a second voltage is applied in the off-hook condition, based on whether the sensed current is below or above the respective reference current (Ludeman, claim 1). In view of this limitation, one of ordinary skill in the art would not be motivated to "keep voltage constant such that a loop current can be reduced to a value below a threshold value," as alleged by the

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Examiner on page 12 of the Office Action. In this regard, it appears the Examiner has merely taken Ludeman's "constant voltage" terminology out of context, and then improperly applies this terminology in the Office Action to allegedly read on Applicant's claim 15.

Therefore, for at least the reason that Ludeman fails to teach or suggest, among other things, "a controller controlling the loop voltage constant according to the internal signal when the telephone network is disconnected from the external terminal and connected to the main terminal," as recited in claim 15," claim 15 is patentably distinguishable over Ludeman, either separately or in combination with AAPA. Accordingly, it is respectfully submitted that the Examiner has failed to establish a *prima facie* case of obviousness with respect to claim 15, and that the subject claim is patentably distinguishable over both AAPA and Ludeman, either separately or combined. Therefore, withdrawal of the rejection and allowance of claim 15 are respectfully requested.

Dependent Claim

Claim 16

For at least the reason that claim 16 depends from independent claim 15, which is allowable for at least the reasons pointed out above, and therefore contains each of the features recited in this independent claim, it is respectfully submitted that claim 16 is also patentably distinguishable over AAPA and Ludeman, either separately or in combination, for at least the same reasons in which claim 15 is allowable. In addition, the Examiner cites AAPA to allege that it teaches "that the main terminal comprises a first DC supply unit, the external terminal comprises a second DC supply unit generating the loop voltage, and the controller controls the first DC supply unit to generate the loop voltage constant when the telephone network is switched from the external terminal to the main terminal." See, Office Action, page 12. Here, the Examiner has misquoted the terminology of claim 16 by changing the word "maintain" to "generate" in interpreting claim 16. This is an important distinction, since AAPA fails to teach or suggest, among other things, "maintaining the loop voltage constant when the telephone network is switched from the external terminal to the main terminal," as recited in claim 16. Instead, as pointed out above with respect to claims 1 and 6, the first and second loop voltages of AAPA are not maintained when the telephone network is switched, but, in fact, are changed.

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Accordingly, it is respectfully submitted that the Examiner has failed to establish a *prima facie* case of obviousness with respect to claim 16, and that the subject claim is patentably distinguishable over both AAPA and Ludeman, either separately or combined. Therefore, withdrawal of the rejection and allowance of claim 16 are respectfully requested.

Conclusion


It is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, there being no other objections or rejections, this application is in condition for allowance, and a notice to this effect is earnestly solicited.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided below.

If any further fees are required in connection with the filing of this amendment, please charge the same to our Deposit Account No. 502827.

Respectfully submitted,
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